

How do I Join and get a Newsletter?

Did you pay your dues to FVARC, P O Box 7541, Kalispell, MT 59901? Club dues are \$20 for the year (January through December). They will be prorated after June according to the month you join at 2\$ per month. 15\$ is club fund, 5\$ is repeater fund. Many people use the club's repeaters but don't pay the dues that support the repeaters. If this describes you and you feel even a little guilty we could use your support.

All first time licensed amateurs receive club membership free for a year. Be sure and register with our Treasurer, Barbara Magone KB7YMS, at 862-4066. All younger than 18 receive club membership for half price. **If you're not getting the newsletter and you should be, or you are getting it and shouldn't, then contact Ed Mahlum at 300 Leisure Drive, Kalispell 755-6673.**

President's Letter

Well It's that time again, after a month off it's time for a meeting of the Flathead Valley Amateur Radio Club. I personally will not be very active for the next few months on the bands. But with the HF bands being like they are I guess it doesn't make a lot of difference. That is the bad news the good news is that when I get the time again to work the bands I will have a 50 foot tower with a tri bander on it. For those who haven't heard I'm in the process of building a new home for myself and Manny. Because of my involvement in building the new home I will be unable to continue as President of the club beyond the end of my term in December. I hope there is someone out there, that would be willing to take over when the elections come about.
73's Don Ross KJ7IZ

Sick and Hurting:

George W7BKB reported that on August 21, Norma Hoepfer passed away after a lengthy battle with cancer. She was the wife of Larry Hoepfer N7BJT. She was a graduate of Minot Teachers College and her first teaching job was in Great Falls, where she met Larry. They lived in Bigfork from 1953 to 1957 and then moved to Columbia Falls where she taught the fifth grade until retiring in 1986. She will be missed much and our club extends its deepest sympathy to Larry.

We are also sorry to report that N7AWG, Tom Morrow passed away around 1AM September 11, here in Kalispell. Tom had been real active in the club until he had a stroke a few years back. Tom was a strong CW man. He had a Drake TR-7 and never unpacked the mikes on either one. He was our president for one term. Services were held in Fort Benton.

Robert Holding, KB7WIS also passed away September 11. Many of you remember Bob from this years field day. He was definitely a CW man. He worked Morse Code during World War II. I know as an examiner I was surprised when he came to a test session a couple of years ago. We set up the tape for the 20 word per minute test. Bob took the test. When it was finished he said "It is different copying that code without headphones and a typewriter." When we checked his test, he had perfect copy. He worked morse code for us at field day. He only learned that he had pancreatic cancer about a month ago. Bob distinguished himself as an attorney which was his life long vocation. He will also be missed.

Minutes Flathead Valley Amateur Radio Club July 27, 1995

Meeting was called to order at 7:30PM by President Don Ross KJ7IZ. Treasurer's report accepted. Club \$115.36 in regular fund and \$614.05 in repeater fund. Minutes accepted as put in the newsletter were approved.

Introductions:

Given with 27 in attendance.

Old Business:

There are also lots of tubes, parts, wires, etc, that any club member is welcome to look over and to take if they can find them useful. See **Gary Ax at 7559353.**

Books were setup and on display along with other ARRL materials: Now You're Talking!, Instructor's Manual for Now You're Talking, Technician Class License Manual, Novice/Tech Class Instructor's Guide, General Class License Manual, General Class Instructor's

Guide, Advanced Class License Manual, First Steps in Radio, Extra Class License Manual, You're Introduction to Morse Code (tapes), The FCC Rule Book.

Committee Reports:

Repeaters - W7VOS Rod Stickney will chair, WA7PHB Harry Lovering, W7HGM Nick Poncelet, N7SPI Tracy Robertson, KG7MO Darrell Christofferson (tower man) and KB7WIX Larry Magone.

None.

RACES - KE9XR Wayne Ristine, W7VOS Rod Stickney and WA7PHB Harry Lovering.

No report.

Field Day - KE9XR Wayne Ristine, KB7YMS/KB7QPS Barb and Gregg Magone, AA7TN Ed Mahlum, N7SPK Vern Wheeler, and KB6WBD Carlos.

As in July Newsletter.

Education - KB7IPH Mark Skeels, and KC7HJ Russ Larson.

No report.

Presentation - N7EYU Roger Swearengen, AA7TN Ed Mahlum, KA6YSC/N6SLM Mark and Joann Miller, and WA9TAF Dennis Shaw.

Next meeting Ed Mahlum hopes to have a video of a combination amateur radio ATV and weather balloon experiment.

New Business.

W4EWZ Cloyd Taylor sent 5 boxes of test equipment to the club including an oscilloscope, a grid dip meter, a frequency counter. It was suggested that the club keep the equipment at Gary Ax's the club property manager's. Ed Mahlum will send Cloyd a thankyou note. Gary Ax was at the meeting so he will get with Don and get the gear over to his place. **Thanks alot Cloyd!!!** We will continue with our policy of allowing club members to check the equipment out.

Third Sunday in August, August 20, Irv Ball and wife Myrna will be having the annual Big Arm picnic down at there place. Take Rocky point road out of Polson, go 3 and .2 mile, first guard rail on the right, half a mile before the end of the pavement, turn to the right down to the Lake. Get talked in on .04 Missoula.

Larry Magone moved and Dick Lindeman seconded that we suspend the August meeting, and meet up at Irv Ball's picnic.

Presentation:

Automotive installation of ham gear.

The major manufacturer's say absolutely not. Ten years ago the rules were to keep the antenna as far a way from the radio as possible and hook wires directly to the battery.

Now the object is to keep RF away from the computers in the cars. Run both wires to the battery and fuse it on both sides. Shield the power cable and ground it with 100 ohm resistor and 1 to 10 picofarad capacitor. Do not install the radio with out the chassis grounded. Be sure radio is grounded to car body. Location is important. The ECMS are in different places, some are under the seat, some under the dash. Subaru, Toyota were reluctant to talk. Dick talked to people far away and locally. He called Detroit for most of it. The local people had no information.

Cable routing should cross car wiring at ninety degrees, but don't run it parallel. Get technical service bulletin to locate the ecm devices. Not one manufacturere will honor their warranties if the equipment is not factory installed. Including stereos. Often they

will work with you.

The ARRL has met with the auto industries and setup a committee. Most of the equipment can handle up to about 100 watts, but it always depends on the situation. Three years ago it was ten watts.

Keep antenna as far away from ECMs as possible. If you use a trunk lid run a seaparate continuous braided ground to the frame, because a lot of newer cars are built in sections. Make sure it is grounded through the frame and not a feedback ground. These feedback grounds could be grounded even through the main ECM. Do not have any resistance. If there is resistance then probably are grounding through a device. No frequencies are better.

Handheld devices under ten watts are OK, but brick amplifiers do cause problems. Length of coax as short as possible and no coils. Figure 8 it or tie it together in the middle. ECM's started being used in about 72. Ford is beginning to mold shielding around the ECM's plastic with lead.

Highway Patrol runs 80 to 100 watts. The installer for them is pulling his hair out all the time. His biggest problem is the radar guns that screws up the speed o'meter and seat belt controls.

None of the manufacturer's knew of a case where the engine wouldn't run. But get guages not workng, electronic seats, door open lights, cause engine to misfire. Cellular phones even at 1.5 watts have known to cause the car to stop. The September 1994 QST has a good run down on the state of the situation.

Reminder to renew your ARRL membership through the club. Each time we do this the club receives back \$2. See or call KB7YMS Barb Magone at 862-4066. Make your check out to the club for the exact amount and mail it to Barb Magone, 1270 Carrol, Whitefish, MT 59937. She will resubmit it to the ARRL.

Raffle still at \$1 per ticket for the Swan 1200-X HF 400 watt amplifier. The amp is up and running at the club station according to Gary Ax KB7KXE. Tickets will be taken until the July meeting at which a winner will be drawn from the can.

Motion made to adjourn by Jack Klovestad. Meeting adjourned for coffee and cookies. 2030MST. Respectfully submitted Ed Mahlum.

Coming Events:

November 18 Sat----- VE Exams, Daily Interlake, Kalispell
February 96 ---- Race to the Sky

Club HF Station:

Club station up and running at KB7KXE Gary Ax's house. If you want to use it get a hold of Gary 755-9353.

Jobs:

Club Trustee: WA7PHB Harry Lovering
Emergency Coordinator: KE9XR Wayne Ristine.
Coffee and Cookies: Paul Athorn.
Property Manager: KB7KXE Gary Ax.
Movies: N7EYU Roger Swearengen
Librarian/Historian: KB7IPH Mark Skeels

Remember encourage all hams to join the ARRL, it is our best voice to help our existence. Some may love HF, others DX, some VHF and UHF, some packet, some satellite, some CW, some computers and repeaters; but it we don't work together to preserve our frequencies nobody else is going to do it for us.

Board of Directors:

President - Don Ross KJ7IZ - 7567171, Vice President - Wayne Ristine KE9XR - 2574162, Secretary - Ed Mahlum AA7TN - 7556673, Treasurer - Barb Magone KB7YMS - 8624066, Trustee - Harry Lovering WA7PHB - 7528388, Gary Ax KB7KXE - 7559353, Tracy Robertson N7SPI - 7551795, Mark Skeels KB7IPH - 7520073, Rod Stickney W7VOS - 7554850.

Board of Director's Meeting

July 15, 1995

11AM at Glacier/Waterton Hamfest.

1. Call for Bills and expenses needing to be Paid. Ed Mahlum will be paid for newsletter expenses.
2. Treasurers Report. None.
4. Club dues. Dues will increase to \$24 a year in 1996. This will make it easier to prorate to 2\$ per month. They will be due in January.
5. Committee reports:
 - a. Repeater (resources repair and future direction). Rod Stickney, Harry Lovering, Vern Wheeler, Nick Poncelet. None.
 - b. Education (training of Hams). Mark Skeels, JoAnn Miller, Mark Miller, Russ Larson. None.
 - c. Field Day. Wayne Ristine, Barb & Greg Magone, Gary Ax, Tracy Robertson. None.
 - d. Emergency Communications. Wayne Ristine, Rod Stickney, Harry Lovering, Jon Rashleigh, Mike Tuszynski. No report.
 - e. Presentation (Program for Club Meetings). Roger Swearngen, JoAnn Miller. Dick Lindeman will lead the next meeting.
6. Gary Ax is working on a list of the club equipment.

Flathead Flyer BBS

KJ7IZ Don Ross' bbs now has the current call book available. Just dial in and look up a callsign for information. The number is 756-1369. Don mostly runs the BBS for free but he has expenses. The suggested donation is \$10 a year.

Form 610:

Ed Mahlum (AA7TN) has new form 610 with expiration date of 8/31/96 via the W5YI VEC testing team here in the Valley headed up by Darrel Christofferson KG7MO. They will not process the old forms any longer.

Flathead Valley Repeater Group:

Please note that the FVRG maintains 3 repeaters, 146.62, 147.34, and 147.20 and is working on adding a repeater to the Meadow Peak area about 45 miles west of Kalispell on US2 at an elevation of around 6500 feet. As always, the purpose of this addition to the FVRG system will be to provide emergency communications for use by any federal/state/local agency as required. To provide emergency phone service it will be linked to 62 in the same manner as q47.34 and 147.20. The link codes will be : 270, On; 270#, off.

The membership is a modest \$15 per year to cover electrical/telephone/newsline expenses. All amateurs are welcome to support and join. The FVRG helps coordinate many amateur activities throughout the year from litter collection, bicycle race communications, the dog-sled race communications, and provides a phone patch on the 146.62 repeater. Contact the FVRG at P O Box 808, Bigfork, MT 59911.

From the FVRG newsletter comes this helpful information on the Kalispell NON-EMERGENCY Autodial. Sometimes the 911 autodial is not appropriate to report certain minor events around the valley. A new autodial slot has been reserved for reporting such matters to the Kalispell Police. The number is 752-2626, and it is in autodial slot 10*99. Remember that Flathead Sheriff, for reporting non-911 type events outside Kalispell but within the county, is 752-6161 and is

in autodial slot 10*98.

Also remember to **help out travellers** to our area with the phone patch through 146.62. The IUAC to use is 669 for control up. Then *2 and the number. Push to talk after the number is read back. When the session is over *6 brings down the autopatch and then 0* brings down the control.

Ham Exams:

They will be held November 18, 1995 at 1PM at the Daily Interlake Building in Kalispell. Bring a copy of your license for upgrading, a current photo id, \$5.90, and some pencils. If you have any questions about time and place call Darrel 756-8633, Ed AA7TN at 755-6673, Wayne KE9XR at 257-4162. Once you have passed an exam wait about ten days and then call this **ARRL number to check on new license 1-800-326-3942.** The last exams were September 16 with 3 people testing and upgrading.

Glacier Waterton Hamfest:

The Glacier Waterton Hamfest was a great success this year. The weather was excellent with just a tiny bit of rain, but mostly partly cloudy skys, nice sunshine and temperatures in the 70s. W7BKB George and Helen Hanson, Sam Cox, Tom N7WKT, Tracy N7SPI, Bruce N7SRX, Wayne KE9XR, Rod W7VOS, Michelle, Ed AA7TN, Dennis KB7MZZ and Margo, Jim Payne, Carlos, Maurice, Dennis and Jared Fryer. This was a lot of fun there must have been six hundred people easy. We all got served great hamburgers at lunch from the Great Falls group. There was a great test session with about 20 people taking exams. Ed mahlum's son Daniel got his Tech Plus. They had bingo for the younger kids, crafts and scavenger hunts. There was a craft sale. Several had used gear for sale and Amateur Radio Supply out of Seattle was selling new gear. They had morse code contests, many meetings, John Vugteveen's presentation, Mary Lou Brown from the ARRL, and Darryl Thomas our section manager.

Big Arm Picnic:

The Big Arm Picnic was held at Irv Ball's N7MEA down off Rocky Point Road near Polson on Sunday August 13th. W7IPB said there was good representation with folks from Missoula, Detroit, French Town, Libby, Kalispell, and Lakeside. All had a good time and there was plenty of food and a couple of cakes. Maurice N7NHS added that the discussion is always interesting and picked up a few ideas. Harry WA7PHB added that he met a visitor from South Dakota KA0OQQ, who was there with some other friends. Irv, Myrna and Priscilla gave tests in the morning to six people and they all passed. Irv and Myrna your hospitality was much appreciated and all of your work putting on the picnic.

146.76 Repeater Report

Rod Stickney W7VOS, Darrell KG7MO and Ardis N7WKF, Ed and Daniel Mahlum AA7TN and KC7MHL went up to tune the 76 repeater on Saturday August 19. The weather was good but for a slight breeze. This was the editor's first time in the cozy building that houses the 76 repeater. TCI loans us space and power in the building and lets us put our antenna up on their tower. Thanks a lot TCI. There are a lot of transmitters up on Blacktail Mountain. Our repeater receives on 146.16 and transmits on 146.76. Rod was hoping to deal with a desensitization problem that has developed. When we listen on the input of 146.16 even 100mw from the Valley floor 30 miles away sounds good, but the repeater has become desensitized and will not repeat that low of a signal. On the other hand if we crank the power up on the repeater's transmit side we get what we have come to call our "crocodile". A scratchy screeching whistling noise at the end of transmission, as though the repeater is keeping itself going with feedback, and we suspect intermod problems.

For starters we coupled a handheld to the duplexer, removed the antenna and plugged in a watt meter passing through to a dummy load. Then on the receive cavities we retuned them while transmitting through them the 146.76 or transmit frequency so that they would completely reject the 146.76 and we had 0 watts output. The receive cavities then should not pickup anything from the transmitter. Next

we input 146.16 on the transmitter cavities and tuned them to completely reject that frequency until we had 0 watts showing on output. For good measure we attached a car rig with 30 watts output and redid the above.

In the meantime Darrell climbed the tower and put up our isoloop antenna and brought down our stick. Not as easy as it sounds. What with the climbing harness, the wind blowing, the lift rope being unmanageable, and the tower being 120 feet high. But heck isn't that why they call us amateurs.

Once Darrell was down Rod set to fine tuning the cavities (duplexer). With the help of George W7BKB, Giles KC7FFN and Bob W7IPB all talking and running as low a power as possible, Rod made final adjustments to get the lowest possible power to be picked up and put through the repeater without our crocodile reappearing. We didn't get the repeater to pickup as low a power as we would have liked and it was coming in clear on 146.16, nor were we able to get as much power out as we would have liked without the crocodile coming back. But we left knowing the repeater was doing better than it had and to ponder the mysteries. We know the whole rig works great away from Blacktail and highly suspect that the RF from literally tens of transmitters might have something to do with the situation.

Update on 76 Repeater: Well that doggone crocodile came back. Rod went up and got the repeater the following day and brought it down to his place. He set it up there and tuned to full power and everything works just great. We held the net through his house on August 21. Later that week Rod got it all tuned up and back on the Mountain **where now it is working great! Thanks for all the hard work Rod!!!**

Huckleberry 100 Report

The Huckleberry 100 was held on Sunday September 3rd. This was a tour and not a bicycle race. There were about 125 participants. There were two courses, both starting at 8:30 AM from the Whitefish High School. Both courses took their riders west on US2 4 miles and then cut over to Farm-to-Market, and South to Foy's Lake, for a snack stop. They then continued to Kalispell; the the 60 mile route branched up to Columbia Falls and back to WFHS, while the 100 mile branched to Bigfork, a stop for lunch, then on to Columbia Falls for a snack and back to Whitefish. Hams met at the WFHS at 7:45 for coordination. Many worked the whole route and some checked in and helped out during parts of the day. We had those great magnetic signs for our cars again that showed who we were and how we were helping.

Highway Cleanup

This is the last of 3 efforts in 95 by area amateurs to help our public roads look a little better. Same schedule as previous cleanups. Meet at Streeter's Corner Cafe, junction of Hwy 35 and 83 at 10AM for breakfast and /or coffee, and visit with hams. Depart around 10:30 for our 2 mile section of Hwy 35, beginning about a mile north of Streeter's. Should be done by Noon. See you there!

For Sale Wanted or Trade:

Feel free to bring stuff to the Club Meetings that you would like to sell or trade.